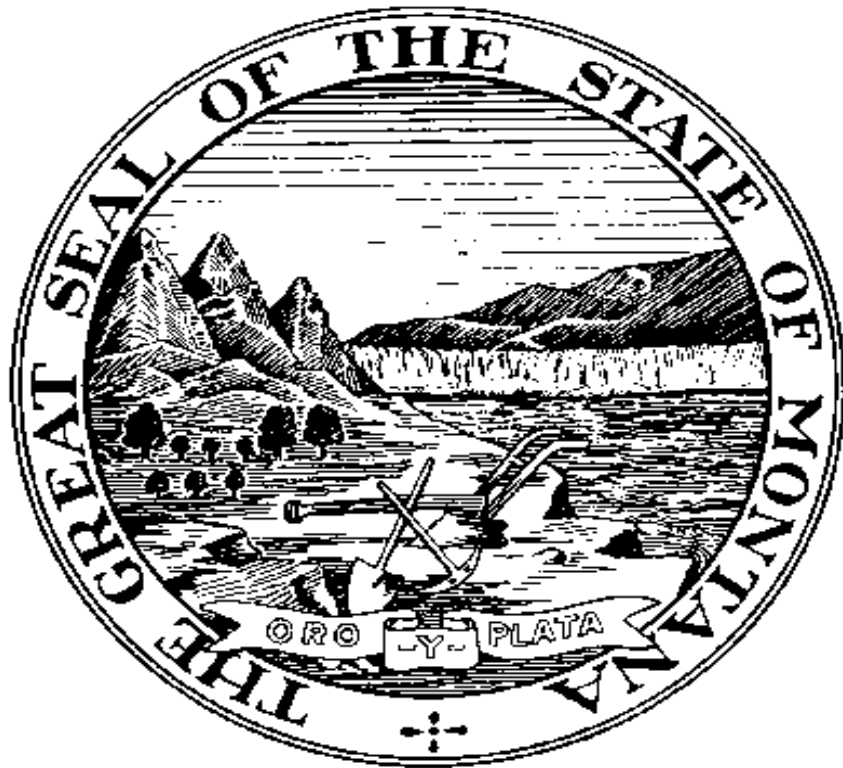


Forklift Safety Guide

29 CFR 1910.178

Occupational Safety & Health Bureau



Montana Department of Labor & Industry

Prepared for Montana Employers
by the

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Introduction

This booklet has been prepared to assist employers in their efforts to prevent worker injury and comply with the provisions of the Montana Safety Culture Act and the requirements of the Occupational Safety and Health Administration (OSHA) standards.

This booklet provides an overview of OSHA's Powered Industrial Truck Standard: 29 CFR 1910.178. Employers should attain a copy of this standard and make it readily available to their employees (see resources page for ordering information, a free copy of the standard can be obtained from the OSHA web site). It will also make recommendations for general safe practices for powered industrial truck use.

The OSHA standard contains safety requirements relating to fire protection, design, maintenance, use, and operator training for industrial powered trucks. Industrial powered trucks include forklifts, tractors, platform lift trucks, motorized hand trucks, and other specialized industrial trucks. Powered industrial trucks are used to carry, push, pull, lift, stack or tier material. This standard does not cover vehicles used for earth moving or over-the-road hauling.

The standard requires a training program based on the trainee's prior knowledge and skill, types of powered industrial trucks used in the workplace and the operator's demonstrated ability to handle a powered industrial truck safely. Evaluation of each operator's performance is required as part of the initial and refresher training, and at least once every three years.

The objective of this booklet is to make employers and operators of powered industrial trucks aware of their responsibility in the safe use of the equipment. This booklet is not intended to be totally inclusive of the OSHA standard but it will provide a guideline safety program for powered industrial truck use. Employers should develop their own safety program for their worksite.

I. General Requirements

1. All powered industrial trucks (PITs) acquired after Feb. 15, 1972 must meet the design and construction requirements for PITs established in the American National Standard Institute (ANSI) for Powered Industrial Trucks, Part II, ANSI B56.1-1969.
2. Approved trucks must bear a label or some other identifying mark indicating approval by the testing laboratory.
3. All name plates and markings on the truck must be in place and in a legible condition. Name plates should show the weight of the truck and its rated capacity as specified by ANSI/ASME B56.1.
4. Modifications and additions which affect capacity and safe operation must not be performed without manufacturers prior written approval.
5. If the truck is equipped with front-end attachments other than a factory installed attachments, the user shall request that the truck be marked to identify the attachments and show the approximate weight of the truck and attachment combination at maximum elevation with load laterally centered.
6. Many states have labor laws that restrict the age of forklift operators. In Montana the minimum age for

a forklift operator is 18 years old.

A. Designations

Listed below are powered industrial truck designations as prescribed by the OSHA standard.

D - diesel powered with minimum acceptable safeguards against inherent hazards.

DS - diesel powered with additional safeguards to the exhaust, fuel, & electrical systems.

DY - diesel powered with all of the safeguards as DS and do not have any electrical equipment including ignition and are equipped with temperature limitation features.

E - electrical powered with minimum acceptable safeguards against inherent hazards.

ES - electrical powered, with all the requirements of E, have additional safeguards to the electrical system to prevent emission of hazardous sparks and to limit surface temperatures.

EE - electrical powered, with all the requirements of E & ES, electrical motors and all other electrical equipment completely enclosed.

EX - electrically powered units that differ from E, ES, and EE units in that the electrical fittings and equipment are designed, constructed, and assembled so that the units may be used in certain atmospheres containing flammable vapors and dusts.

G - gasoline powered with minimum acceptable safeguards against inherent hazards.

GS - gasoline powered with additional safeguards to the exhaust, fuel, & electrical systems.

LP - liquefied petroleum gas powered, minimum acceptable safeguards against inherent hazards.

LPS - liquefied petroleum with additional safeguards to the exhaust, fuel, & electrical systems.

B. Designated Locations

For requirements on designated locations see 29 CFR 1910.178(c).

! The atmosphere or location must be classified as hazardous or nonhazardous before consideration of powered industrial truck to be used at that location.

! See Table N-1 in 1910.178 for the use of industrial trucks in various locations.

! Use only trucks that meet the designation requirements for hazardous locations and atmospheres.

C. Safe Guards

1. High lift rider trucks must be fitted with an overhead guard when the truck has the capability of lifting loads overhead or where falling object hazards exist.
2. Overhead guards should not interfere with the driver's visibility and operation of the truck. Openings on the guard should be small enough to protect the operator from being struck by falling material from overhead.
3. If the type of load presents a hazard, the user shall equip fork trucks with a vertical load backrest extension manufactured in accordance with ANSI/ASME B56.1.
4. Other safeguards that can be used to increase safety and reduce driver fatigue include:
 - ! Convex mirrors at blind spots;
 - ! Backup alarms;
 - ! Headlights;
 - ! Turn signals;
 - ! Enhanced front and rear vision;
 - ! Noise-reducing insulation;
 - ! Fail-safe brakes; and
 - ! Comfortable wraparound seats.
5. Employers should develop a company policy to encourage seat belt use on forklifts when it will be driven over rough ground, uneven ground, or long distances. Seat belts are required in the construction standard except for standup operations.
6. Guards should be installed over exposed tires, hazardous moving parts, such as chain-and-socket drives and exposed gears.
7. Horns and flashing overhead lights can be used to warn employees of approaching trucks.
8. Specifications of steering, braking, and other controls should also conform to ANSI B56.1.

D. Fuel Handling and Storage

1. The storage and handling of liquid fuels such as gasoline and diesel fuel shall be in accordance with NFPA Flammable and Combustible Liquids Code (NFPA No. 30-1969).
2. Fill fuel tanks on trucks at designated locations, preferably in the open air, with the filling hose and equipment properly bonded and grounded.
3. Engines must be stopped and operators must be off trucks before they are refilled.
4. Do not permit smoking during refueling.
5. The storage and handling of liquefied petroleum gas fuel shall be in accordance with NFPA Storage and Handling of Liquefied Petroleum Gases (NFPA No. 58-1969).

6. Fire extinguishers should be located at the refueling site and must comply with 29 CFR 1910.157.

D. Batteries

1. Battery charging installations shall be located in a designated area.
2. Facilities must be provided for flushing and neutralizing spilled electrolyte, for fire protection, for protecting charging apparatus from damage by trucks, and for adequate ventilation for dispersal of fumes from gassing batteries.
3. A conveyor, overhead hoist, or equivalent material handling equipment must be provided for handling batteries.
4. All reinstalled batteries must be properly positioned and secured in the truck.
5. When charging batteries, acid must be poured into water instead of water poured into acid.
6. A carboy tilter or siphon must be provided for handling electrolyte.
7. Make sure trucks are properly positioned and brakes applied before attempting to change or charge batteries.
8. Assure that battery vent caps are functioning and the battery covers are open to dissipate heat.
9. Eliminate all possible ignition sources in the area.
10. Smoking must not be permitted in the battery handling area.
11. Keep tools and other metal objects away from the top of uncovered batteries.
12. Workers handling batteries should wear goggles, rubber gloves, aprons, and rubber boots, to protect against acid burns.
13. Rubber mats, wood-slat mats, or clean floorboards can be used to help prevent slips and falls and will protect against electric shock.
14. If acid is spilled on workers clothing it should be washed off immediately with water.
15. Refer to manufacturers recommendations before performing charging and maintenance procedures.
16. Make sure battery chargers are off when batteries are connected and disconnected.

F. Control of Noxious Gases and Fumes

1. Concentration levels of carbon monoxide gas created by powered industrial truck operations must not exceed the levels specified in 1910.1000.

2. Do not leave trucks idling unnecessarily inside buildings or outside near windows or ventilation intake ducts.

G. Trucks and Railroad Cars

1. The brakes of highway trucks must be set and chock blocks placed under the rear wheels to prevent the truck from rolling.
2. Wheel stops or other recognized positive protection shall be provided to prevent railroad cars from moving during loading or unloading.
3. Fixed jacks may be necessary to support a semi-trailer and prevent upending during the loading or unloading when the trailer is not coupled to a tractor.
4. Flags should be used during unloading and loading, to warn the driver not to move the trailer.

H. Truck Operation

1. Trucks must not be driven up to anyone standing in front of a bench or other fixed objects.
2. Workers must not be allowed to pass under the elevated portion of any truck, whether loaded or empty.
3. Unauthorized personnel must not be allowed to ride on powered industrial trucks. A safe place to ride must be provided where riding of trucks is authorized.
4. Operators arms or legs must be prohibited from being placed between the uprights of the mast or outside the running lines of the truck.
5. When a powered industrial truck is left unattended load engaging means must be fully lowered, controls shall be in neutral, power must be shut off, and brakes set. Wheels need to be blocked if the truck is parked on an incline.
6. A safe distance must be maintained from the edge of ramps or platforms while on any elevated dock, or platform or freight car. Trucks shall not be used for opening or closing freight doors.
7. Looking out for pedestrians is also the truck operator's responsibility. They should sound the horn when approaching pedestrians.

I. Traveling

1. Operators must observe all traffic regulations, including authorized plant speed limits.
2. A safe distance must be maintained approximately three truck lengths from the truck ahead, and the truck shall be kept under control at all times.
3. Do not pass other trucks traveling in the same direction at intersections, blind spots, or other dangerous locations.

4. Divers must be required to slow down and sound the horn at cross aisles and other locations where vision is obstructed. If the load being carried obstructs forward view, the driver must travel with the load trailing.
5. Ascend or descend grades slowly.
6. When ascending or descending grades in excess of 10 percent, loaded trucks must be driven with the load upgrade.
7. Dockboard or bridge plates, must be properly secured before they are driven over and their rated capacity never exceeded.
8. Elevators must be approached slowly, and then entered squarely after the elevator car is properly leveled. Once on the elevator, the controls shall be neutralized, power shut off, and the brakes set.
9. When transporting material, keep the load no more than 6-10 inches off the floor and use extreme caution when turning.

J. Loading

1. Only stable or safely arranged loads shall be handled. Caution must be taken when handling off-center loads which cannot be centered.
2. Place heavy, odd shaped objects with the weight as low as possible.
3. Loads should never exceed the trucks rated capacity.
4. Use extreme caution when tilting the load forward or backward, particularly when high tiering.
5. Tilting forward with the load engaging means elevated shall be prohibited except to pick up a load.
6. An elevated load must not be tilted forward except when the load is in deposit position over a rack or stack.

K. Maintenance

1. Any power-operated industrial truck not in safe operating condition shall be removed from service and all repairs made by authorized personnel.
2. No truck should be operated with a leak in the fuel system until the leak has been corrected.
3. Repairs to the fuel and ignition system which involve fire hazards must be conducted only in designated repair locations.
4. When working on the electrical system the battery must be disconnected.
5. All parts that are replaced must be replaced with parts equivalent as to safety with those used in the

original design.

6. Before and end of shift maintenance and safety checks need to be performed before the forklift is used. Defects need to be reported and corrected before the fork lift is used. (See appendix 1. for an example of a safety and maintenance checklist.)

7. Water mufflers shall be filled daily or as frequently as necessary to prevent depletion of the water supply below 75 percent of the filled capacity.

8. Vehicles with mufflers having screens or other parts that may become clogged must be cleaned of any debris or unclogged before operation.

9. Any vehicle that emits hazardous sparks or flames from the exhaust system shall immediately be removed from service and repaired.

10. Vehicles with any overheating problems must be removed from service immediately and repaired.

11. Industrial trucks must be kept clean, free of lint, excess oil, and grease. Noncombustible agents should be used for cleaning trucks. Low flash points (below 100 deg F.) solvents shall not be used.

L. Required Operator Training

OSHA published the new training standard for powered industrial trucks on December 1, 1998. These requirements become effective March 1, 1999. Listed below are the requirements found in the 29 CFR 1910.178 for operator training.

Safe Operation

1. The employer shall ensure that each powered industrial truck operator is competent to operate a powered industrial truck safely, as demonstrated by the successful completion of the training evaluation specified in 29 CFR 1910.178 paragraph (l). Employees will not be allowed to operate forklifts, except for training, unless they have met all training requirements.

Training Program Implementation

2. Trainees may operate a powered industrial truck only:

! Under direct supervision of persons who have knowledge, training, and experience to train and evaluate operators competence; and

! Where operation does not endanger the trainee or other employees.

3. Training must consist of a combination of formal instruction, practical training, and evaluation of the operator's performance in the workplace.

4. All training and evaluation must be conducted by persons who have the knowledge, training, and experience to train and evaluate powered industrial truck operators.

Training Program Content

Operators must receive training in the following topics:

Truck-related topics:

- ! Operating instructions, warnings, and precautions for the type of truck the operator will be authorized to operate;
- ! Differences between the truck and the automobile;
- ! Truck controls and instrumentation: where they are located, what they do, and how they work;
- ! Engine and motor operation;
- ! Steering and maneuvering;
- ! Visibility (including restrictions due to loading);
- ! Fork and attachment adaption, operation, and use limitations;
- ! Vehicle capacity and stability;
- ! Any vehicle inspection and maintenance that the operator will be required to perform;
- ! Refueling and/ or charging and recharging batteries;
- ! Operating limitations;
- ! Any other operating instructions, warnings, or precautions listed in the operator's manual for the types of vehicle that the employee is being trained to operate.

Workplace-related topics:

- ! Surface conditions where the vehicle will be operated;
- ! Composition of loads to be carried and load stability;
- ! Load manipulation, stacking, and unstacking;
- ! Pedestrian traffic in areas where the vehicle will be operated;
- ! Narrow aisles and other restricted places where the vehicle will be operated;
- ! Hazardous (classified) locations where the vehicle will be operated;
- ! Ramps and other sloped surfaces that could affect the vehicle's stability;

- ! Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a buildup of carbon monoxide or diesel exhaust;
- ! Determining whether the load is safe to handle;
- ! Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation; and
- ! The training requirements.

Refresher Training and Evaluation:

Refresher training must be provided when:

- ! The operator has been observed to operate the vehicle in an unsafe manner;
- ! The operator has been involved in an accident or near-miss incident;
- ! The operator has received an evaluation that reveals that the operator is not operating the truck safely;
- ! The operator is assigned to drive a different type of truck; or
- ! A condition in the workplace changes in a manner that could affect safe operation of the truck.
- ! An evaluation of each powered industrial truck operator's performance shall be conducted at least once every three years.

Avoidance of Duplicate Training

If an operator has previously received training in a topic and such training is appropriate to the truck and working conditions encountered, additional training in that topic is not required if the operator has been evaluated and found competent to operate the truck safely.

Certification

The employer must certify each operator has been trained and evaluated as required by this standard. The certification must include the name of the operator, the date of the training, the date of the evaluation, and the identity of the person(s) performing the training and evaluation.

All employees that operate a forklift, if only occasionally, need training first. New operators with previous experience or training need at least a test of operating proficiency and instruction in the hazards of the particular job and in the truck maintenance program. An operator with extensive experience on one brand or model of truck still needs time to get used to controls placed in different positions or to different attachments or truck types.

There are many commercial training programs available through the National Safety Council or forklift

dealers. They offer training for individual drivers, as well as maintenance training and supervisor training which can enable employers to set up an in-house training program.

M. State Occupational Safety and Health Consultation Project

A source of assistance with construction and general industry safety and health is the Montana Onsite Consultation Project. This division of the Department of Labor and Industry operates independently of OSHA's enforcement branch. The program was developed with small businesses in mind, and is available to private sector employers who want help in recognizing and correcting jobsite hazards.

When an employer uses the service, a trained occupational safety and health professional conducts a free onsite "inspection" and consultation. No citations or penalties are given for any of the problems that the inspector/consultant may find, and the service is completely confidential. The employer has the responsibility and obligation through the program to correct the identified hazards within an allotted amount of time. In addition, the consultant can assist in developing and maintaining an effective safety program, offer jobsite training and education for employees, and help locate other sources of assistance for safety and health concerns.

Although this program can be beneficial, you must realize that there is still no guarantee that a jobsite that has received the consultation services will "pass" an OSHA inspection. For information about Montana's Onsite Consultation Project please contact:

Safety & Health Bureau
Department of Labor and Industry
P.O. Box 1728
Helena, MT 59624-1728
(406) 444-6401

N. Resources

Additional information about occupational safety and health standards and regulations can be obtained from:

1. U.S. Department of Labor, **Occupational Safety & Health Administration, (OSHA)**. Public Affairs Office- Room 3647, 200 Constitution Ave., Washington, D.C. 20210.
Phone: 1-202-693-1999.

www.osha.gov

2. **National Institute for Occupational Safety and Health, (NIOSH)**. Department of Health and Human Services,

200 Independence Ave. SW 317B, Washington, DC 20201.

Phone: 1-800-356-4674, 1-800-35-NIOSH

www.niosh.gov

3. **American Conference of Governmental Industrial Hygienists, (ACGIH)**.

1330 Kemper Meadow Drive, Cincinnati, OH 45240-1634.

Phone: 1-513-742-2020, Fax: 1-513-742-3355

www.acgih.org

4. American National Standards Institute, (ANSI).

11 West 42nd Street, New York, NY 10036.

Phone: 1-212-642-4900, Fax: 1-212-398-0023

www.ansi.org

5. American Society of Mechanical Engineers, (ASME).

Three Park Avenue, New York, NY 10016.

Phone: 1-800-THE-ASME,

E-mail: ASME InfoCentral.

www.asme.org

6. National Fire Protection Association, (NFPA).

P.O. Box 9101, One Batterymarch Park, Quincy, MA 02269-9101.

Phone: 1-800-344-3555, Fax: 1-617-770-0700

www.nfpa.org

7. Department of Energy, (DOE).

Forrestal Building, 1000 Independence Ave. SW.

Washington, DC 20585.

www.doe.gov

8. National Safety Council,

1121 Spring Lake Drive, Itasca, IL 60143-3201

Phone: 1-630-285-1121, Fax: 1-630-285-1315

www.nsc.org

Appendix 1. Inspection Checklist (Example)

OPERATOR'S DAILY REPORT

Battery-Powered Lift Trucks

Truck No. _____ Make _____ Date _____ Shift _____

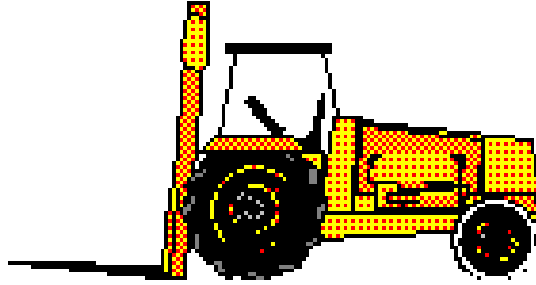
Hour Meter Reading: Start _____ End _____ Hours of Shift _____

Check Each Item _____ Shift _____ Explain if not OK _____
If OK write OK _____ Start _____ During _____ End _____

1. Battery plug connection				
2. Battery charge				
3. Battery load test				
4. Lights - head, tail, warning				
5. Brakes - service/parking				
6. Horn				
7. Hour meter				
8. Steering				
9. Tires				
10. Hydraulic controls				
11. Hydraulic cylinders				
12. Hydraulic fluid level				
13. Overhead guard				
14. Mast assembly				
15. Lift chains / rollers				
16. Forks				
17. Load handling attachments				
18. Other conditions				

Remarks and additional explanation or suggestions: _____

Operator's Signature _____ Time: _____



POWERED INDUSTRIAL TRUCK OPERATOR TRAINING - STABILITY OF POWERED INDUSTRIAL TRUCKS SUMMARY OF APPENDIX A

- **A-1. Definitions**

- The following definitions help to explain the principle of stability:
 - Center of Gravity is a point on an object at which all of the object's weight can be considered to be concentrated.
 - Counterweight is the weight that is a part of the truck's basic structure that is used to offset the load's weight and to maximize the vehicle's resistance to tipping over.
 - Fulcrum is the truck's axis of rotation when it tips over.
 - Grade is a surface's slope that is usually measured as the number of feet of rise or fall over a hundred foot horizontal distance (measured as a per cent).
 - Lateral stability is a truck's resistance to tipping over sideways.
 - Line of action is an imaginary line through an object's center of gravity.
 - Load center is the horizontal distance from the load's edge (or the fork's or other attachment's vertical face) to the line of action through the load's center of gravity.
 - Longitudinal stability is the truck's resistance to overturning forward or rearward.
 - Moment is the product of the object's weight times the distance from a fixed point. In the case of a powered industrial truck, the distance is measured from the point that the truck will tip over to the object's line of action. The distance is always measured perpendicular to the line of action.
 - Track is the distance between wheels on the vehicle's same axle.
 - Wheelbase is the distance between the centerline of the vehicle's front and rear wheels.

- **A-2. General**

- Stability determination for a powered industrial depends on a few basic principles. There are many factors that contribute to a vehicle's stability:
 - vehicle wheelbase;
 - track;
 - height;
 - the load's weight distribution; and,
 - the vehicle's counterweight location (if so equipped).
- The "stability triangle," used in most stability discussions, demonstrates stability simply.

- **A-3. Basic Principles**

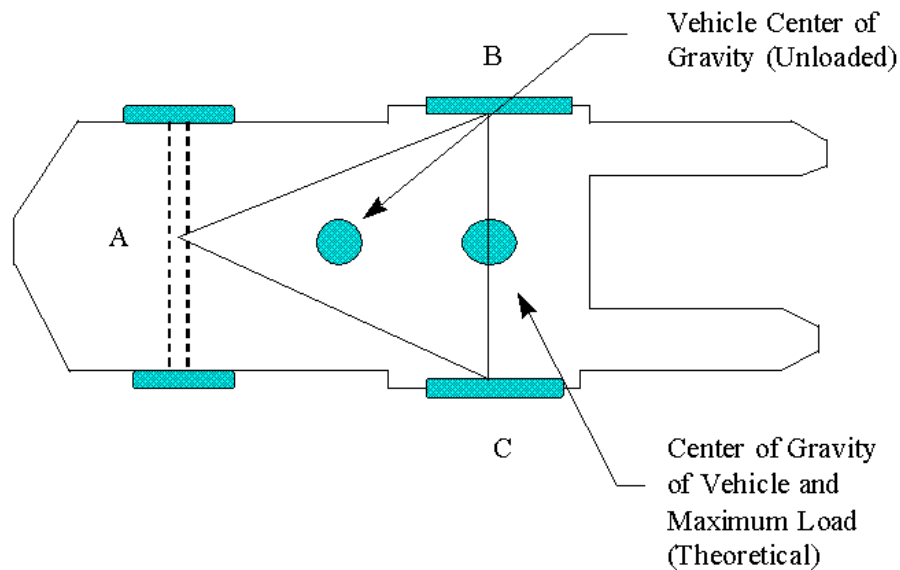
- Determining whether an object is stable is dependent on the object's moment at one end of a system being greater than, equal to, or smaller than the object's moment at the system's other end. This is the same principle on which a seesaw works. If the product of the load and distance from the fulcrum (moment) is equal to the moment at the device's other end; the device is balanced and will not move. However, if there is a greater moment at the device's one end, the device will try to move downward at the end with the greater moment.
- Longitudinal stability of a counterbalanced powered industrial truck depends on the vehicle's moment and the load's moment. In other words, if the mathematic product of the load moment (the distance from the front wheels, the point about which the vehicle would tip over) to the load's center of gravity times the load's weight is less than the vehicle's moment, the system is balanced and will not tip forward. However, if the load-moment is greater than the vehicle-moment, the greater load-moment will force the truck to tip forward.

- **A-4. The Stability Triangle**

- Almost all counterbalanced powered industrial trucks have a three-point suspension system, that is, the vehicle is supported at three points. The truck's steer axle is attached to the truck by a pivot pin in the axle's center. When the points are connected with imaginary lines, this three-point support forms a triangle called the stability triangle.

Figure 1 depicts the stability triangle.

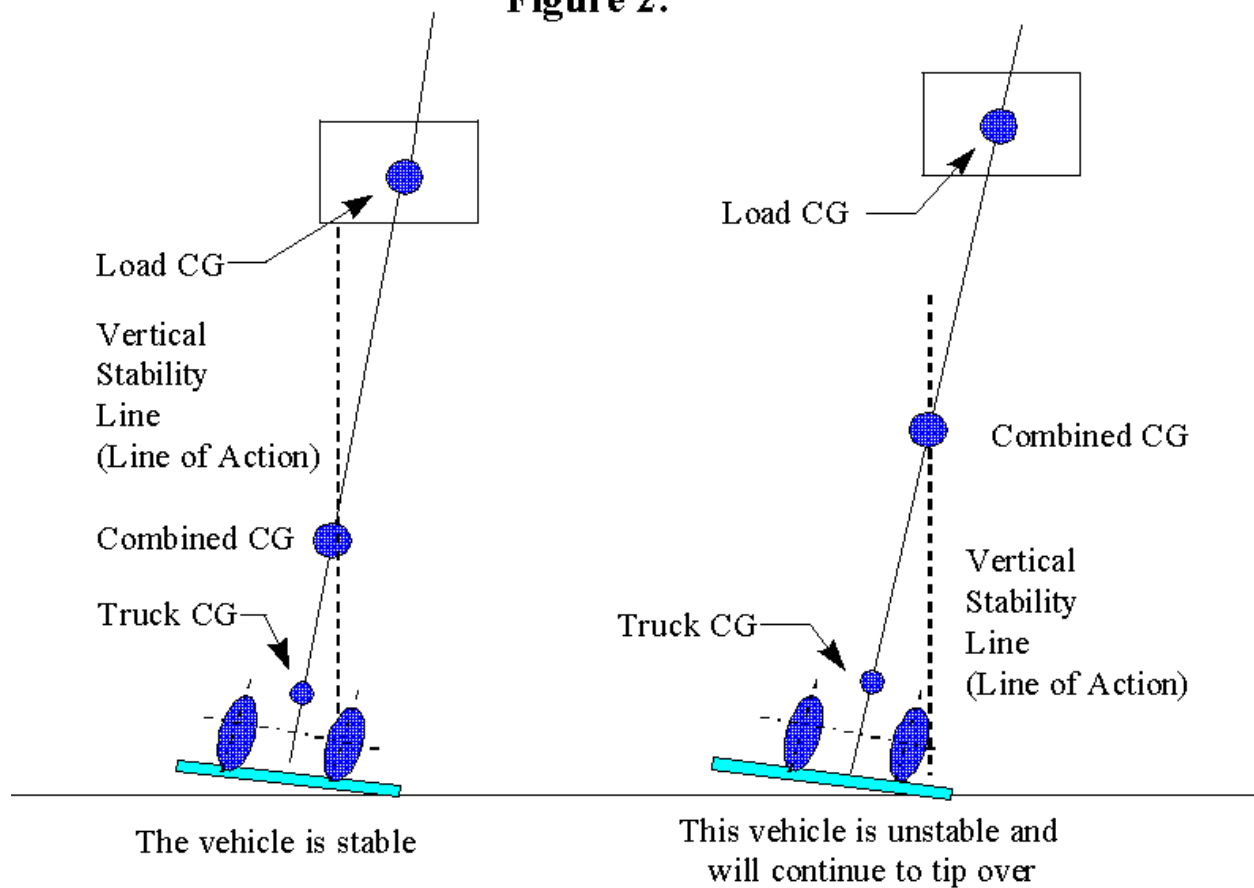
Figure 1.



Notes:

- When the vehicle is loaded, the combined center of gravity (CG) shifts toward line B-C. Theoretically, the maximum load will result in the CG at the line B-C. In actual practice, the combined CG should never be at line B-C.
- The addition of additional counterweight will cause the truck CG to shift toward point A and result in a truck that is less stable laterally.
- When the vehicle's line of action, or load center, falls within the stability triangle, the vehicle is stable and will not tip over. However, when the vehicle's line of action or the vehicle/load combination falls outside the stability triangle, the vehicle is unstable and may tip over. **See Figure 2.**

Figure 2.



- **A-5. Longitudinal Stability**

- The axis of rotation when a truck tips forward is the front wheels' points of contact with the pavement. When a powered industrial truck tips forward, the truck will rotate about this line. When a truck is stable, the vehicle-moment must exceed the load-moment. As long as the vehicle-moment is equal to or exceeds the load-moment, the vehicle will not tip over. On the other hand, if the load moment slightly exceeds the vehicle-moment, the truck will begin to tip forward, thereby causing loss of steering control. If the load-moment greatly exceeds the vehicle moment, the truck will tip forward.
- To determine the maximum safer load-moment, the truck manufacturer normally rates the truck at a maximum load at a given distance from the front face of the forks. The specified distance from the front face of the forks to the line of action of the load is commonly called a load center. Trucks with a 30,000 pounds or less capacity are normally rated at a given load weight at a 24-inch load center. For trucks of greater than 30,000

pounds capacity, the load center is normally rated at 36- or 48-inch load center distance. **To safely operate the vehicle, the operator should always check the data plate to determine the maximum allowable weight at the rated load center.**

- Although the true load-moment distance is measured from the front wheels, this distance is greater than the distance from the front face of the forks. Calculation of the maximum allowable load-moment using the load-center distance always provides a lower load-moment than the truck was designed to handle. When handling unusual loads, such as those that are larger than 48 inches long (the center of gravity is greater than 24 inches) or an offset center of gravity, etc., a maximum allowable load moment should be calculated and used to determine whether a load can be safely handled.
 - For example, if an operator is operating a 3000 pound capacity truck (with a 24 inch load center), the maximum allowable load moment is 72,000 inch pounds (3,000 times 24). If a probable load is 60 inches long (30-inch load center), then the maximum that this load can weigh is 2,400 pounds (72,000 divided by 30).

- **A-6. Lateral Stability**

- The vehicle's lateral stability is determined by the lines of action's position (a vertical line that passes through the combined vehicle's and load's center of gravity) relative to the stability triangle. When the vehicle is not loaded, the truck's center of gravity location is the only factor to be considered in determining the truck's stability. As long as the line of action of the combined vehicle and load's center of gravity falls within the stability triangle, the truck is stable and will not tip over. However, if the line of action falls outside the stability triangle, the truck is not stable and may tip over.
- Factors that affect the vehicle's lateral stability include the load's placement on the truck, the height of the load above the surface on which the vehicle is operating, and the vehicle's degree of lean.

- **A-7 Dynamic Stability**

- The dynamic forces that result when the vehicle and load are put into motion must also be considered. The weight's transfer and the resultant shift in the center of gravity due to the dynamic forces created when the machine is moving, braking, cornering, lifting, tilting, and lowering loads, etc., are important stability considerations.
- When determining whether a load can be safely handled, the operator should exercise extra caution when handling loads that cause the vehicle to approach its maximum design characteristics. For example, if an operator must handle a maximum weight load, the load should be carried at the lowest practical height, the truck should be accelerated slowly and evenly, and forks should be tilted forward cautiously. However, no precise rules can be formulated to cover all of these eventualities.

MODEL NO.				TYPE																	
SERIAL NO.																					
ATTACHMENTS																					
<p>Diagram showing the center of gravity (CG) and dimensions A, B, and C relative to the floor.</p>	CAPACITY WITH ATTACHED LISTED ABOVE OR WITH FORKS - UPRIGHTS VERTICLE <table border="1"> <thead> <tr> <th>LBS</th> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					LBS	A	B	C												
LBS	A	B	C																		
APPROX. WT. ALL TRUCKS																					
APPROX. WT. ELECTRICS ONLY																					
BATTERY WT.																					
BATTERY CAPACITY																					
	LESS BATT ELECTRICS																				
	WITH MAX. BATT WT.																				
	MAX				MIN																
	AH				NO																
	LBS				VOLT																

FOR OTHER CAPACITIES - CONSULT MANUFACTURER
AS RELEASED FROM FACTORY THIS TRUCK MEETS THE
DESIGN SPECIFICATIONS ESTABLISHED IN AMERICA
NATIONAL STANDARD FOR POWERED INDUSTRIAL TRUCKS.
PART II, ANSI B56.1-1969 PART NO. 2315709

Example of a forklift data plate.